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Dated: October 21, 2005

Signature:

Denise Kacinski
(Denise Kacinski)

Docket No.: 62052(51588)
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Mark C. Poznansky et al.

Application No.: 10/537,610

Confirmation No.: Unknown

Filed: June 3, 2005

Art Unit: Not Yet Assigned

For: METHODS AND COMPOSITIONS
RELATING TO GRADIENT EXPOSED
CELLS

Examiner: Not Yet Assigned

INFORMATION DISCLOSURE STATEMENT (IDS)

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Commissioner for Patents
P.O. Box 1450
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Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed before the mailing date of a first Office Action on the merits as far as is known to the undersigned (37 CFR 1.97(b)(3)).

Applicant has not submitted copies of each cited U.S. patent and U.S. patent application as required by 37 CFR 1.98(a)(2)(i), amended October 2004, as the U.S. Patent and Trademark Office has waived this requirement for all U.S. patent applications. Applicant submits herewith copies of foreign and non-patents in accordance with 37 CFR 1.98(a)(2).

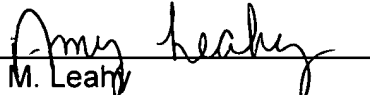
In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 04-1105, under Order No. 62052(51588). A duplicate copy of this paper is enclosed.

Dated: October 21, 2005

Respectfully submitted,

By 
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Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/537,610
				Filing Date	June 3, 2005
				First Named Inventor	Mark C. Poznansky
				Art Unit	N/A
				Examiner Name	Not Yet Assigned
Sheet	1	of	2	Attorney Docket Number	62052(51588)

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	AA	US-2002/0098187	07/25/2002	Ferrara et al.	
	AB	US-6,238,874	05/29/2001	Jamagin et al.	
	AC	US-5,994,298	11/30/1999	Tsai et al.	
	AD	US-5,514,555	05/1996	Springer, et al.	
	AE	US-5,760,084	05/1998	Honjo et al.	
	AF	US-4,737,413	04/1998	Buchanan	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				
	BA	WO 00/9678	02/24/2000	Tularik Inc.		
	BB	WO 95/07985	03/1995	Williams et al.		
	BC	WO 98 09642	03/1998	Oppenheim		
	BD	WO 00/59941	10/12/2000	Poznansky et al.		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ²
	CA	YANG et al. "Efficient Lysis of Human Immunodeficiency Virus Type 1-Infected Cells by Cytotoxic T Lymphocytes." Journal of Virology (1996) 5799-5806			
	CB	CAO et al. "Cytotoxic T-Lymphocyte Cross-Reactivity among Different Human Immunodeficiency Virus Type-1 Clades: Implications for Vaccine Development." Journal of Virology (1997) 8615-8623			
	CC	YANG et al. "Suppression of Human Immunodeficiency Virus Type-1 Replication by CD8+ Cells: Evidence for HLA Class I-Restricted Triggering of Cytolytic and Noncytolytic Mechanisms." Journal of Virology (1997) 3120-3128			
	CD	WUNDERLICH et al. "Assays for T Cell Function, Induction and Measurement of Cytotoxic T Lymphocyte Activity." Current Protocols in Immunology (1997) 3.11.1-3.11.20 Supplement 21			
	CE	OYAIU et al. "Human Immunodeficiency Virus Type 1 Envelope Glycoprotein gp120 Produces Immune Defects in CD4+ T Lymphocytes by Inhibiting Interleukin2 mRNA." Proc. Natl. Acad. Sci. (1990) 87: 2379-2383			
	CF	SCHOLS et al. "Human Immunodeficiency Virus Type 1 gp120 Induces Anergy in Human Peripheral Blood Lymphocytes by Inducing Interleukin-10 Production." Journal of Virology (1996) 4953-4960			
	CG	LIEGLER et al. "HIV-1 gp120 and anti-gp120 induce reversible unresponsiveness in peripheral CD4 T lymphocytes." J Acquire Immune Defic Syndr (1994) 7(4): 340-8			
	CH	MANCA et al. " Inhibitory activity of HIV envelope gp120 dominates over its antigenicity for human T cells." Clin. Exp. Immunol. (1992) 88 17-22			

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CI	CHIRMULE et al. "Inhibition of Functional Properties of Tetanus Antigen-Specific T-Cell Clones by Envelope Glycoprotein GP120 of Human Immunodeficiency Virus." Blood (1990) 75(1) 152-159
CJ	LAVERGNE et al. "Leukocyte Migration Inhibition in Vitro in Bladder Carcinoma." Cancer Research 39 (1979) 1985-1988
CK	WRIGHT et al. "Cell-Mediated Immunity in Patients with Renal Cell Carcinoma as Measured by Leukocyte Migration Inhibition Test." Urology (1978) XII(5): 525-531
CL	BUENING "Cell-Mediated Immune Response in Anaplasmosis as Measured by a Micro Cell-Mediated Cytotoxicity Assay and Leukocyte Migration-Inhibition Test." Am J Vet Res (1976) 37(10): 12156-1218
CM	POTTER et al. "Lymphocyte proliferation and cytotoxic assays using flat-bed scintillation counting." Journal of Immunological Methods (1987): 105 171-177
CN	KIMPTON et al. "Lymphocyte Migration during the Development of Regional Lymph Node Anergy in Experimental Tumor Growth." Cellular Immunology (1983) 75, 13-21
CO	KRISTENSEN "A Comparative Study of Natural Cytotoxicity and the Leukocyte Migration Inhibition in Human Melanoma Stages I and II." J. Cancer Res. Clin. Oncol. (1980) 96: 181-191
CP	SANO et al. "A new Fluorochromasia method using a fluorescence microplate reader for assay of cytotoxic activity of carp leucocytes." Veterinary Immunology and Immunopathology (1995); 47, 173-178
CQ	RAJKOVIC et al. "Rapid Microassays of Phagocytosis, Bacterial Killing, Superoxide and Hydrogen Peroxide Production by Human Neutrophils in Vitro." Journal of Immunological Methods (1985): 78, 35-47
CR	MILLER et al. "Killing of Cryptococcus neoformans Strains by Human Neutrophils and Monocytes." Infection and Immunology (1991) 59(1): 24-28
CS	BAGNARD et al. "Semaphorins act as attractive and repulsive guidance signals during the development of cortical projections." Development 125, 5043-5053 (1998)
CT	SHIOI et al. "Oxygen as Attractant and Repellent in Bacterial Chemotaxis." Journal of Bacteriology 169(7) 3118-3123 (1987)
CU	KLEIN et al. "Perlecan in Human Bone Marrow: A Growth-Factor-Presenting, but Anti-Adhesive, Extracellular Matrix Component for Hematopoietic Cells." Matrix Biology 14, 457-465 (1994)
CV	ZAITSEVA et al. "CXCR4 and CCR5 on Human Thymocytes: Biological Function and Role in HIV-1 Infection." The Journal of Immunology 3103-3113 (1998)
CW	BAILEY et al. "Chemotaxis by Entamoeba Histolytica" J. Protozool 32(2): 341-346 (1985) ABSTRACT ONLY
CX	BERMAN et al. "Functional Characteristics of histamine-receptor-bearing mononuclear cells. II. Identification and Characterization of two histamine-induced human lymphokines that inhibit lymphocyte migration." J. Immunol., 133(3) 1495-504 (1984)
CY	CHAFFIN et al. "A Pertussis Toxin-Sensitive Process Controls Thymocyte Emigration" Eur. J. Immunol. 21(10): 2565-73 (1991) ABSTRACT ONLY
CZ	FRIEDL et al. "Locomotor recruitment and negative chemotaxis of human T lymphocytes confronted with autologous primary cancer explants in three-dimensional (3-D) collagen lattices in vitro" Proceedings of the America Assoc. for Cancer Res. Annual, 37:446 (1996)
CA1	GEBHARD et al. "Inter-alpha-trypsin inhibitor complex component II precursor-human" PIR Protein Sequence
CB1	KEATING et al. "Negative Chemotaxis in Cellular Slime Molds" J. Bacteriol 130(1): 144-147 (1977) ABSTRACT ONLY
CC1	KHAN et al. Chemotactic Signal Integration in Bacteria" Proc. Natl. Acad. Sci. USA 92(21): 9757-9761 (1995) ABSTRACT ONLY
CD1	KELLER et al. "Diverging effects of chemotactic serum peptides and synthetic

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Sheet	3	of	2	Attorney Docket Number	62052(51588)

		formylmethionylleucyl phenyl alanine on neutrophil loco motion and adhesion" Immunology 42(3): 379-384 (1981)	
CE1	LIU et al. "Analysis of chemokine (S) produced by mouse thymic stromal cell lines" Shih Yen Sheng Wu Hsueh Pao 29(1): 25-32 (1996) Chinese Abstract		
CF1	MCFADDEN et al. "Rat lymphokines control the migration of nonsensitized lymphocytes" Cellular Immunology, 118(2):345-357 (1989)		
CG1	NIGGEMANN et al. "Locomotor phenotypes of human tumpr cell lines and T lymphocytes in a three-dimensional collagen lattice." Cancer Lett. 118(2): 173-80 (1997)		
CH1	LUSTER "Chemokines-Chemotactic Cytokines That Mediate Inflammation" Mechanisms of Disease 338(7):436-445 (1998)		
CI1	BAGGIOLINI "Chemokines and leukocyte traffic" Nature 392:565-568 (1998)		
CJ1	BLEUL et al. "A highly efficacious lymphocyte chemoattractant, stromal cell derived factor 1 (SDF-1) J Exp Med 184(3):1101-1109 (1996)		
CK1	BLEUL et al. "The lymphocyte chemoattractant SDF- is a ligand for LESTR/fusion and blocks HIV-1 entry" Nature 382(6594): 829-833 (1998)		
CL1	KIM et al "Differential Chemotactic Behavior of Developing T Cells in Response to Tymic Chemokines" Blood 91(12): 4434-4443 (1998)		
CM1	KIM et al. "CKB-11/Macrophage Inflammatory Protein-3B/EBI:1-Ligand Chemokine is an Efficacious Chemoattractant for T and B Cells" J Immunol. 160:2418-2424 (1998)		
CN1	COLAMARINO et al. "The Axonal Chemoattractant Netrin-1 is Also a Chemorepellent for Tochlear Motor Axons" Cell 81:621-629 (1995)		
CO1	WELLS et al. "Definition, function and pathophysiological significance of chemokine receptors" TIPS 19:376-380 (1998)		
CP1	ARAKAKI et al. "T134, a Small-Molecule CXCR4 Inhibitor, Has No Cross-Drug Resistance with AMD3100, a CXCR4 Antagonist with a Different Structure" J Virol 73(2):1719-1723 (1999)		
CQ1	HEVEKER et al. "Dissociation of the signaling and antiviral properties of SDF-1 derived small peptides" Current Biol. 8(7):369-376 (1998)		
CR1	LOETSCHER et al. "N-terminal Peptides of Stromal Cell-derived Factor-1 with CXC Chemokine Receptor 4 Agonist and Antagonist Activities" J Biol Chem 273(35): 22279-22283 (1998)		
CS1	LUO et al. "Attachment of C-Terminus of SDF-1 Enhances the Biological Activity of Its N-Terminal Peptide" Biochem Biophys Res Commun 264(1):42-47 (1999)		
CT1	MURAKAMI et al. "A Small Molecule CXCR4 Inhibitor that Blocks T Cell Line-tropic HIV Infection" J Exp Med 186(8):1389-1393 (1997)		
CU1	POZNANSKY et al. "Thymocyte emigration is mediated by active movement away from stroma-derived factors" J Clin Invest 109(8):1101-1110 (2002)		
CV1	POZNANSKY et al. "Active movement of T cells away from a chemokine" Nat Med 6(5):543-548 (2000) ABSTRACT ONLY		
CW1	POZNANSKY et al. "Tissue source dictates lineage outcome of human fetal CD34(+) CD38(-) cells" Exp Hematol 29(6):766-774 (2001) ABSTRACT ONLY		
CX1	POZNANSKY et al. "Efficient generation of human T cells from a tissue-engineered thymic organoid" Nat Biotechnol 18(7):729-734 (2000) ABSTRACT ONLY		
CY1	OLSZAK et al. "Extracellular calcium elicits a chemokinetic response from monocytes in vitro and in vivo" J Clin Invest 105(9):1299-1305 (2000) ABSTRACT ONLY		
CZ1	POZNANSKY et al. "Inhibition of human immunodeficiency virus replication and growth advantag of CD4+T cells and monocytes derived from CD34+ cells transduced with an intracellular antibody dir cted against human immunodeficiency virus type 1 Tat" Hum Gene Ther, 10(15):2505-2514 (1999) ABSTRACT ONLY		
CA2	ADAMS et al. "Isolation and transduction of CD34+ cells from small quantitiers of peripheral blood from HIV-1-infected patients not treated with hemopoietic growth factors" J Acquir Immune Defic Syndr 21(1):1-8 (1999) ABSTRACT ONLY		

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Sheet	4	of	2	Attorney Docket Number	62052(51588)

	CB2	ADAMS et al. "Heterologous cells cooperate to augment stem cell migration, homing, and engraftment" Blood 101(1):45-51 (2003) ABSTRACT ONLY	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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